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ANSWER 1 OF 1 CA COPYRIGHT 2002 ACS
       ***118:127738***
AN
                           CA
     Aluminum nitride powder having high resistance to water and chemicals
TI
IN
     Hashimoto, Noboru; Seto, Kazuo
     Matsushita Electric Works, Ltd., Japan
     Jpn. Kokai Tokkyo Koho, 9 pp.
SO
     CODEN: JKXXAF
DT
     Patent
LΑ
     Japanese
     ICM C01B021-072
IC
     49-5 (Industrial Inorganic Chemicals)
     Section cross-reference(s): 38
FAN.CNT 1
     PATENT NO.
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                                           APPLICATION NO.
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PI
     JP 04321506
                       A2
                            19921111
                                           JP 1991-92424
                                                             19910423
     JP 2981002
                       B2
                            19991122
     MARPAT 118:127738
     Organosilicon compd. layers (thickness .ltoreg.2 .mu.m) having siloxane
AB
     bonding are formed on the surfaces of the AlN powder. The organosilicon
     compd. layers are prepd. from coating compns. contg. (A) SiO2-dispersed
     oligomer solns. of organosilane prepd. by hydrolysis of hydrolyzable
     organosilane having general formula RlnSiX4-n [Rl = Cl-8 monovalent
     hydrocarbon groups (same or different, substituted or unsubstituted); n =
     0-3 (integers); X = hydrolyzable group] in org. solvent, or partial
     hydrolysis of organosilane in colloidal SiO2-dispersed org. solvent and
     water; (B) silanol group-contg. polyorganosiloxanes having av. compn.
     formula R2aSi(OH)bO(4-a-b)/2 [R2 = C1-8 monovalent hydrocarbon groups
     (same or different, substituted or unsubstituted); 0.2 .ltoreq. a .ltoreq.
     2; 0.0001 .ltoreq. b .ltoreq. 3; but a + b < 4; and (C) catalyst. The
     powder is used as filling materials for plastics.
     aluminum nitride powder water resistance; chem resistance aluminum nitride
     powder; filler plastic aluminum nitride powder
IT
     Catalysts and Catalysis
        (contg. dibutyl-tin-dilaurate, in formation of organosilicon compd.
        coatings on aluminum nitride powder)
IT
     Plastics
     RL: USES (Uses)
        (fillers for, organosilicon compd.-coated aluminum nitride powder as)
IT
     Siloxanes and Silicones, uses
     RL: USES (Uses)
        (org., coatings, on aluminum nitride powder, for resistances to water
        and chems.)
     Coating materials
        (organosilicon compd., on aluminum nitride powder, for resistances to
        water and chems.)
IT
     Water-resistant materials
        (fillers, chem.-resistant, organosilicon compd.-coated aluminum nitride
        powder as, for plastics)
     77-58-7 3069-29-2, N-.beta.-Aminoethyl-.gamma.-aminopropylmethyl-
IT
     dimethoxysilane
     RL: CAT (Catalyst use); USES (Uses)
        (catalyst contg., in formation of organosilicon compd. coatings on
        aluminum nitride powder)
     24304-00-5, Aluminum nitride
     RL: USES (Uses)
        (powder, organosilicon compd.-coated, with resistances to water and
        chems., as fillers, for plastics)
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